Fig 1

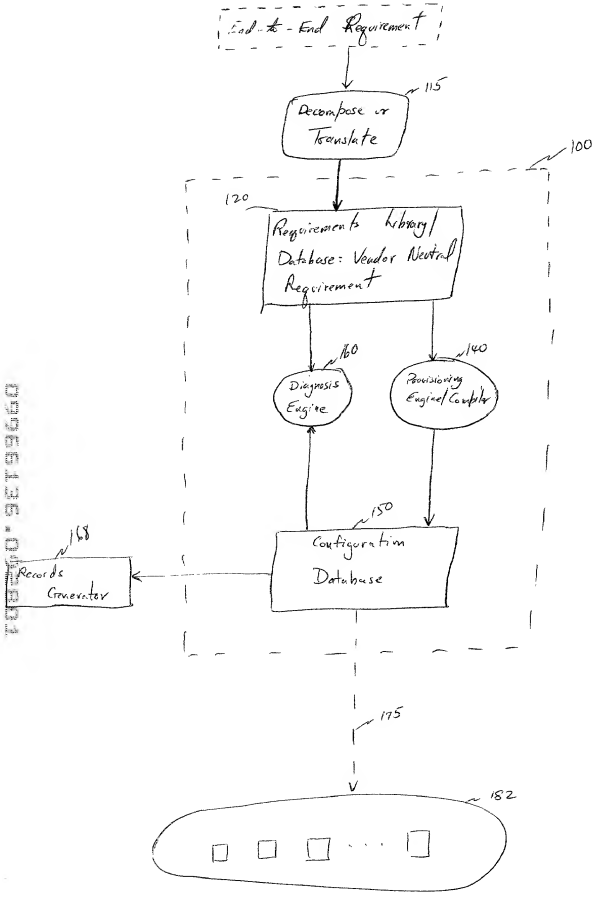

End-to-End Requirement
115
Decompose or Translate
100
120
Requirements Library/ Database: Vendor Neutral Requirement
160
Diagnosis Engine
140
Provisioning Engine/Compiler
150
Configuration Database
168
Records Generator
175
182

FIG. 2

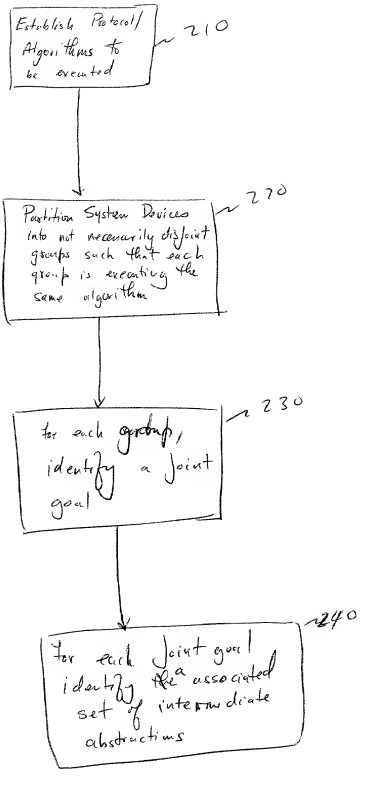

Establish Protocol/ Algorithms to be executed
210
Partition System Devices into not necessarily disjoint groups such that each group is executing the same algorithm
220
for each group, identify a joint goal
230
for each joint goal identify the associated set of intermediate abstractions
240

FIG. 3A

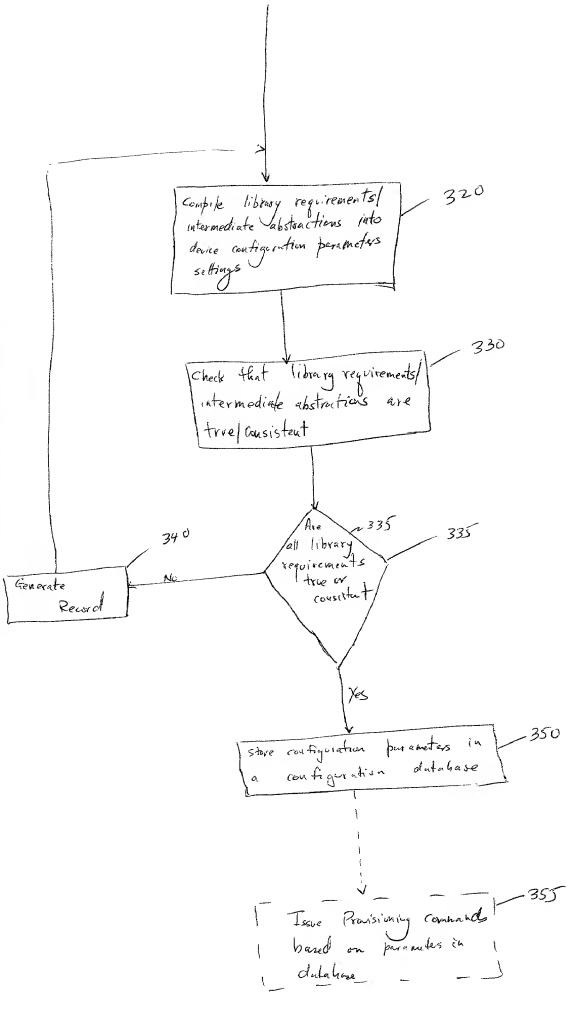
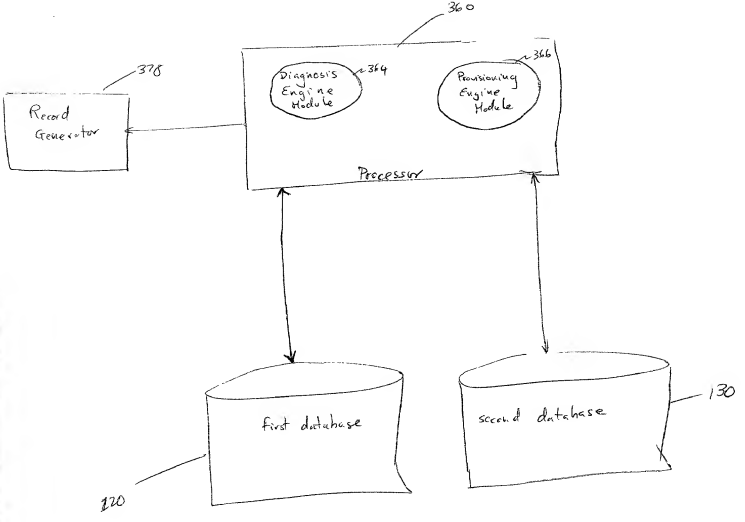

Compile library requirements/ intermediate abstractions into device configuration parameters settings
320
Check that library requirements/ intermediate abstractions are true/consistent
330
Are all library requirements true or consistent
335
335
340
No
Generate Record
Yes
store configuration parameters in a configuration database
350
Issue Provisioning commands based on parameters in database
355

FIG 3B


360
378
Record Generator
Diagnosis Engine Module
364
Provisioning Engine Module
366
Processor
First database
120
second database
130

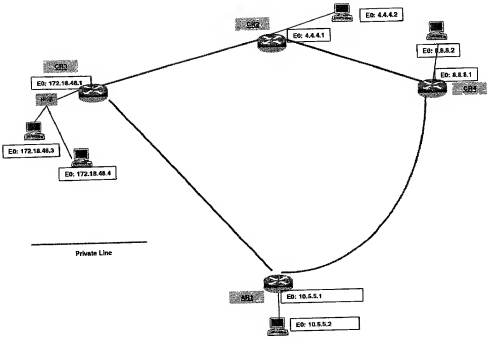


Figure 4A. Network of Private Lines

09956156.092803

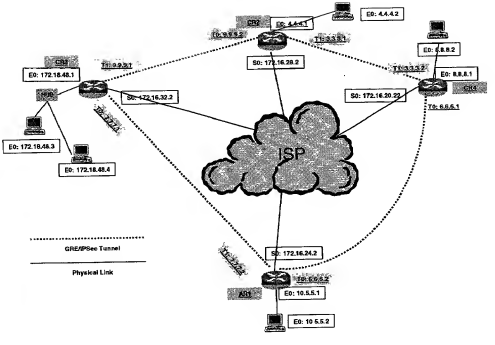


Figure 4B. Restoring Connectivity and Resilience

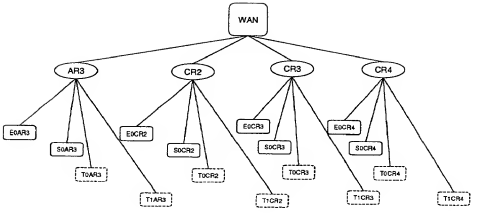


Figure 4C. Configuration Database For Resilient Tunnel VPN